1. (currently amended) An apparatus for generating outgoing data ~~(OD)~~ to be provided on an optical disk ~~(1)~~ in a burst cutting area ~~(2)~~, the burst cutting area ~~(2)~~ further comprising markings ~~(3)~~ causing a marking frequency spectrum ~~(MFS)~~ when reading out the burst cutting area ~~(2)~~, the apparatus comprises

a channel encoder ~~(4)~~ for receiving processed data ~~(PD)~~ to supply the outgoing data ~~(OD)~~ having an outgoing data frequency spectrum ~~(DFS)~~ with suppressed DC-content, and

a data processing device ~~(5)~~ for generating the processed data ~~(PD)~~ to obtain the outgoing frequency spectrum ~~(DFS)~~ wherein a frequency component causing interference with a low frequent component of the markings ~~(3)~~ is suppressed or not present.

2. (currently amended) An apparatus for generating outgoing data ~~(OD)~~ as claimed in claim 1, wherein the data processing device ~~(5)~~ is arranged for converting incoming data ~~(ID)~~ to obtain the processed data ~~(PD)~~ representing the incoming data ~~(ID)~~ and causing the outgoing frequency spectrum ~~(DFS)~~ wherein all frequency components interfering with a low frequent component of the markings ~~(3)~~ are suppressed or not present.

3. (original) An apparatus for generating outgoing data (OD) as claimed in claim 1, wherein the markings (3) comprise a barcode.

4. (original) An apparatus for generating outgoing data (OD) as claimed in claim 1, wherein the data processing device (5) and the channel encoder (4) are arranged to generate the outgoing data (OD) having at least a first and a second predetermined repetition frequency (f1, f2) when reading out the burst cutting area (2), the first and the second predetermined repetition frequency (f1, f2)

both being selected to not coincident with the low frequent component of the markings frequency spectrum (MFS).

5. (original) An apparatus for generating outgoing data (OD) as claimed in claim 1, wherein the data processing device (5) is arranged for obtaining an amplitude of the frequency components of the data frequency spectrum (DFS) below a predetermined frequency (f10) being substantially smaller than an amplitude of the frequency components of the markings frequency spectrum (MFS), wherein the predetermined frequency is selected above the ground frequency (f0) of the markings (3).

6. (original) An apparatus for generating outgoing data (OD) as claimed in claim 1, wherein the data processing device (5) comprises a pre-encoder (5) for pre-encoding incoming data (ID) by replacing data sequences (DSI) of the incoming data (DI) by data sequences of pre-coded data (DSP), the outgoing data (OD) comprises data sequences having a smaller low frequent content than the corresponding data sequences of the incoming data (DSI), a number of bits of the data sequence of the pre-coded data (DSP) being larger than a number of bits of a corresponding one of the data sequence of the incoming data (DSI).

7. (original) An apparatus for generating outgoing data (OD) as claimed in claim 6, wherein the pre-coder (5) is arranged for coding the data sequences (DSI) 00, 01, 10, 11 of the incoming data (DI) into the respective corresponding processed data sequences (DSP) 1010, 0001, 0111, 0101 of the pre-coded data (PD).

8. (original) An apparatus for generating outgoing data (OD) as claimed in claim 7, wherein the pre-coder (5) is further arranged

for coding the data sequence (DSI) 10 10 of the incoming data (DI) into the respective corresponding processed data sequence (DSP) 0000 1000 of the pre-coded data (PD).

9. (original) An apparatus for generating outgoing data (OD) as claimed in claim 2, wherein the apparatus further comprises a random data generator (6) for generating random data as the incoming data (DI).

10. (original) An apparatus for generating outgoing data (OD) as claimed in claim 1, wherein the channel encoder (4) is a 1,7 PP encoder.

11. (previously presented) An apparatus for generating outgoing data (OD) as claimed in claim 2, wherein the incoming data (ID) comprises a layer indication (LI) for indicating a layer of the optical disk (1) on which the outgoing data (OD) is provided.

12. (original) An apparatus for generating outgoing data (OD) as claimed in claim 1, wherein

incoming data (ID) comprises a layer indication (LI) for indicating a layer of the optical disk (1) on which the outgoing data (OD) is or has to be provided, the incoming data (ID) further comprises random data (RDA),

a pre-encoder (5) for pre-encoding the incoming data (ID) by replacing data sequences (DSI) of the incoming data (DI) by data sequences of pre-coded data (DSP), and

the channel encoder (4) receiving the data sequences of pre-coded data (DSP).

13. (original) An apparatus for generating outgoing data (OD) as claimed in claim 12, wherein the incoming data (ID) is divided into frames selected to obtain the processed data having a standard frame structure being also used for user data outside the burst cutting area (2).

14. (original) An apparatus for generating outgoing data (OD) as claimed in claim 12, wherein the incoming data (ID) comprises a 4 bit layer nibble as the layer indication (LI) and 616 bits random data to form a 77.5 byte data frame.

15. (original) An apparatus for generating outgoing data (OD) as claimed in claim 13, wherein the 616 bits random data of the data frame are divided in 1 group of 31 bits and 13 groups of 45 bits, the 1 group of 31 bits further comprises the 4 bit layer nibble and a 10 bit Frame Sync, each of the 13 groups of 45 bits further comprises a DC-control bit to obtain a BCA-frame of 644 bits.

16. (original) An apparatus for generating outgoing data (OD) as claimed in claim 12, wherein the pre-encoder (5) is arranged for coding the data sequences (DSI) 00, 01, 10, 11 and 10 10 of the incoming data (DI) into the respective corresponding processed data sequences (DSP) 1010, 0001, 0111, 0101 and 0000 1000 of the pre-coded data (PD) to obtain a standard frame of 1288 bits being also used for user data outside the burst cutting area (2).

17. (previously presented) An apparatus for generating outgoing data (OD) as claimed in claim 12, wherein the channel encoder (4) is a standard 1,7 PP encoder being also used for user data outside the burst cutting area (2).

18. (original) An apparatus for generating outgoing data (OD) as claimed in claim 17, wherein the 1,7 PP encoder receives in the burst cutting area (2) only a Frame Sync signature which occurs in the outgoing data (OD) as 100 101, 111 001, or 000110.

19. (original) A method of creating outgoing data (OD) to be provided on an optical disk (1) in a burst cutting area (2), the burst cutting area (2) further comprising markings (3) causing a marking frequency spectrum (MFS) when reading out the burst cutting area (2), the method comprises

channel coding (4) receiving processed data (PD) to supply the outgoing data (OD) having an outgoing data frequency spectrum (DFS) with suppressed DC-content, and

data processing (5) for generating the processed data (PD) to obtain an outgoing frequency spectrum (DFS) wherein a frequency component causing interference with a low frequent component of the markings (3) is suppressed or not present.

20. (original) An optical disk (1) comprising data (DA) in a burst cutting area (2), the burst cutting area (2) further comprising markings (3) causing a marking frequency spectrum (MFS) when reading out the burst cutting area (2), the data (DA) comprising frames comprising a layer indication (LI) and a random data sequence (RDA), the frames having a data frequency spectrum (DFS) wherein a frequency component interfering with a low frequent component of the markings (3) is suppressed or not present.

21. (original) An optical disc (1), wherein the data (DA) in the BCA (2) is divided into frames selected to have a standard frame structure being also used for user data outside the burst cutting area (2).

22. (original) An apparatus for manufacturing an optical disk (1) with a burst cutting area (2), the burst cutting area (2) comprising markings (3) causing a marking frequency spectrum (MFS) when reading out the burst cutting area (2), the apparatus comprises,

a channel coder (4) for receiving processed data (PD) to supply the outgoing data (OD) having an outgoing data frequency spectrum (DFS) with suppressed DC-content, and

a data processing device (5) for generating the processed data (PD) to obtain an outgoing frequency spectrum (DFS) wherein a frequency component causing interference with a low frequent component of the markings (3) is suppressed or not present.

23. (original) An apparatus for manufacturing an optical disk (1) as claimed in claim 22, wherein the apparatus further comprises means for providing grooves in the burst cutting area (2).

24. (original) An apparatus for reading an optical disk (1) having a burst cutting area (2) comprising markings (3) and data (DA),

an optical pickup unit (11, 13) for scanning the burst cutting area (2) to obtain a read signal (ES) being dependent on both the markings (3) and the data (DA), a frequency spectrum of the read signal comprising a marking frequency spectrum (MFS) and a data frequency spectrum (DFS), and

a processor (14) for processing the read signal (ES) to retrieve both the data (DA) and the markings (3) by using filters corresponding to the data frequency spectrum (DFS) and the marking frequency spectrum (MFS), respectively.

25. (original) An apparatus for reading an optical disk (1) as claimed in claim 24, wherein the filters comprise a low-pass filter for passing the ground frequency (f0) of the marking frequency spectrum (MFS) and blocking the data frequency spectrum (DFS) to retrieve a marking signal (RMA).

26. (original) Method of reading an optical disk (1) having a burst cutting area (2) comprising markings (3) and data (DA), the method comprising

scanning (11, 13) the burst cutting area (2) to obtain a read signal (ES) being dependent on both the markings (3) and the data (DA), a frequency spectrum of the read signal comprising a marking frequency spectrum (MFS) and a data frequency spectrum (DFS), and

processing (14) the read signal (ES) to retrieve both the data (DA) and the markings (3) by filtering the data frequency spectrum (DFS) and the marking frequency spectrum (MFS), respectively.